

APPENDIX A; PROPOSED REVISED CLAIMS; USSN 08/989,362

1. A composition of matter selected from the group consisting of:

- a) a substantially pure or recombinant 499E9 polypeptide exhibiting 100% sequence identity over a length of at least 12 contiguous amino acids to SEQ ID NO: 2;
- b) a natural sequence 499E9 of SEQ ID NO: 2; or
- c) a fusion protein comprising 499E9 sequence.

2. The recombinant 499E9 polypeptide of Claim 1, wherein said sequence of 100% identity is over at least 17 contiguous amino acids.

3. The composition of matter of Claim 1, wherein said:

- a) 499E9 comprises a mature sequence of Table 1 (see SEQ ID NO: 1), or
- b) protein or peptide is from a mammal.

4. A composition of matter of Claim 1 which is sterile.

5. The fusion protein of Claim 1, comprising:
a) a mature protein comprising sequence of Table 1 (see SEQ ID NO: 2); or

a) a detection or purification tag, including a FLAG, His6, or Ig sequence; or

b) sequence of another tumor necrosis factor ligand protein.

6. A kit comprising a compartment comprising said polypeptide of Claim 1 and instructions for use or disposal of reagents in said kit.

11. An isolated or recombinant nucleic acid encoding a polypeptide or fusion protein of Claim 1, wherein said 499E9 protein is from a mammal.

12. A cell of ~~tissue~~ comprising a recombinant nucleic acid of Claim 11. *am isolated*

13. The cell of Claim 12, wherein said cell is:

- a) a prokaryotic cell;
- b) a eukaryotic cell;
- c) a bacterial cell;
- d) a yeast cell;
- e) an insect cell;
- f) a mammalian cell;
- g) a mouse cell;
- h) a rodent cell; or
- i) a human cell.

14. A kit comprising a compartment comprising said nucleic acid of Claim 11 and instructions for use or disposal of reagents in said kit.

15. A nucleic acid which selectively hybridizes under wash conditions of at least 45° C and less than 500 mM salt to SEQ ID NO: 1.

16. The nucleic acid of Claim 15, wherein:

- a) said wash conditions are at least 55° C and less than 150 mM salt; or
- b) said nucleic acid comprises at least 30 contiguous nucleotides of the coding portion of SEQ ID NO: 1.

21. The ~~composition of~~ *poly peptide* matter of Claim 1, which comprises the natural sequence 499E9 of SEQ ID NO: 2.

22. The recombinant 499E9 polypeptide of Claim 2, wherein said 100% identity *or the recombinant 499E9 polypeptide* is over at least 25 contiguous amino acids.

23. The ~~substantially pure 499E9~~ polypeptide of Claim 2, wherein said 100% identity is over at least 30 contiguous amino acids.

polypeptide of claim 1 said
24. The substantially pure 499E9 polypeptide of Claim 1, ~~which~~ has a length of at least 30 amino acids.

polypeptide of claim 1 wherein the
25. The substantially pure or recombinant 499E9 polypeptide ~~of Claim 1, which is:~~

- a) glycosylated;
- b) a synthetic polypeptide;
- c) attached to a solid substrate; or
- d) conjugated to another chemical entity.

26. A composition comprising said ~~499E9~~ polypeptide of Claim 1 and an aqueous carrier.

27. The composition of Claim 26, formulated for oral, rectal, nasal, topical, or parenteral administration.

isolated or recombinant
28. The nucleic acid of Claim 11, which comprises at least 22 contiguous nucleotides of the coding portion of SEQ ID NO: 1.

29. An isolated or recombinant nucleic acid which encodes a polypeptide ~~or fusion protein~~ of Claim 1, wherein said polypeptide is an antigenic peptide of Table 1 (see SEQ ID NO: 2).

isolated or recombinant
30. The nucleic acid of Claim 29, which comprises at least 29 contiguous nucleotides of the coding portion of SEQ ID NO: 1.

31. An isolated or recombinant nucleic acid encoding a polypeptide of Claim 1, which exhibits 100% identity over the ~~native~~ protein coding portion to a natural DNA encoding said 499E9 *polypeptide.* *of*

32. A vector which encodes a 499E9 polypeptide of Claim 1 and comprises ⁵

^a at least 35 contiguous nucleotides of the coding portion of SEQ ID NO: 1; ^{and}

^a transcriptional regulatory sequences operably linked to said 499E9 coding sequence; or

^b an origin of replication.

33. The vector of Claim 32, comprising at least 41 contiguous nucleotides from the coding portion of SEQ ID NO: 1.

34. An isolated or recombinant nucleic acid encoding ^{the} polypeptide ~~or fusion protein~~ of Claim 1, wherein said nucleic acid:

- a) is from a natural source;
- b) comprises a detectable label;
- c) comprises synthetic nucleotide sequence; or
- d) comprises natural full length coding sequence.

35. An isolated or recombinant nucleic encoding ^{the} polypeptide of Claim 1, which is a hybridization probe for a gene encoding a tumor necrosis factor ligand family protein.

36. A cell comprising said nucleic acid of Claim 29.

37. A cell comprising said nucleic acid of Claim 31.

38. A cell comprising said ^{vector} ~~nucleic acid~~ of Claim 32.

39. A cell comprising said nucleic acid of Claim 34.

40. A kit comprising a compartment comprising a nucleic acid of Claim 34 and instructions for use or disposal of reagents in said kit.

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41. A kit comprising a compartment comprising said nucleic acid of Claim 35 and instructions for use or disposal of reagents in said kit.

42. A method of making a protein, comprising culturing a cell of Claim 12 in an environment resulting in expressing said protein.

43. A method of making a protein, comprising culturing a cell of Claim ~~29~~³⁰ in an environment resulting in expressing said protein.

44. A method of making a protein, comprising culturing a cell of Claim ~~32~~³⁶ in an environment resulting in expressing said protein.

45. A method of making a duplex nucleic acid comprising contacting a nucleic acid of Claim 29 with a complementary nucleic acid under selective hybridization conditions of at least 45° C and less than 500 mM salt, thereby forming said duplex.

46. A method of making a polynucleotide of Claim 11, comprising amplifying said ~~polypeptide~~^{nucleic acid} using PCR amplification methods.